WHAT IS CLAIMED IS:

1. A method for error control in an ad hoc network having an asynchronous communication mode and a synchronous communication mode, the method comprising:

receiving a packet including a header and a payload, the header including a header error check (HEC) computed based on the header;

calculating an error indicator based on the received header;

forwarding the received payload if the calculated error indicator indicates an error free header;

modifying the header, only in the synchronous communication mode, based on an error correction table when the calculated error indicator corresponds to a value in the error correction table and forwarding the received payload;

detecting a received packet error in the synchronous communication mode when the calculated error indicator indicates an error in the header and the calculated error indicator does not correspond to a value in the error correction table; and

detecting a received packet error in the asynchronous communication mode when the calculated error indicates an error in the header.

2. The method of Claim 1 wherein the error indicator comprises a remainder value.

3. The method of Claim 1 wherein the header includes n data bits and wherein the error correction table comprises an n-entry table, each of the entries corresponding to an error in an associated one of the data bits.

4. The method of Claim 3 wherein the ad hoc network comprises a Bluetooth compliant network and wherein detecting a received packet error further comprises discarding the received payload.

5. The method of Claim 4 wherein the header has an eighteen bit length and wherein the HEC comprises eight bits of the header.

6. The method of Claim 4 wherein the received header comprises a repeat coded header and wherein receiving the packet includes demodulating the repeat coded header to provide the header including the HEC.

7. The method of Claim 1 wherein detecting a received packet error further comprises discarding the received payload and wherein the header further includes a destination device address and wherein modifying the header comprises determining a destination device address based on the modified header and forwarding the received payload when the determined destination device address corresponds to an expected destination device address and detecting a received packet error and discarding the received payload when the determined destination device address does not correspond to the expected destination device address.

8. The method of Claim 1 further comprising:

negotiating a synchronous connection-oriented (SCO) link to establish the synchronous communication mode;

associating a frame time with the SCO link; and

characterizing a packet received at about the frame time as a synchronous communication mode received packet; and

wherein modifying the header, only in the synchronous communication mode, comprises modifying the header only for synchronous communication mode received packets.

9. The method of Claim 8 wherein the header further includes a destination device address, the method further comprising:

characterizing packets not received at about the frame time as asynchronous communication mode received packets; and

wherein forwarding the received payload comprises forwarding the received payload for asynchronous communication mode received packets having a destination device address corresponding to an expected destination device address and discarding the received payload for asynchronous communication mode received packets having a destination device address not corresponding to the expected destination device address.

10. The method of Claim 9 wherein modifying the header comprises, for synchronous mode received packets, forwarding the received payload when the determined destination device address corresponds to the expected destination device address and detecting a received packet error and discarding the received payload when the determined destination device address does not correspond to the expected destination device address.

11. The method of Claim 10 wherein the error indicator comprises a remainder value and wherein calculating the remainder value comprises calculating the remainder value based on a generator polynomial and an initial value known to a device receiving a packet and a device transmitting the packet.

12. The method of Claim 11 wherein negotiating a synchronous connection-oriented (SCO) link includes establishing the initial value for the SCO link.

13. The method of Claim 12 further comprising:

estimating a bit error rate for the SCO link; and

disabling modifying the header when the estimated bit error rate fails to satisfy an error correction criterion.

14. A method for error control in an ad hoc network, comprising:

receiving a packet including a header and a payload, the header including a header error check (HEC) computed based on the header;

calculating an error indicator based on the received header;

forwarding the received payload if the calculated error indicator indicates an error free header;

modifying the header based on an error correction table when the calculated error indicator corresponds to a value in the error correction table and forwarding the received payload; and

detecting a received packet error when the calculated error indicator indicates an error in the header and the calculated error indicator does not correspond to a value in the error correction table.

15. A communication device for an ad hoc network having an asynchronous communication mode and a synchronous communication mode, the device comprising:

a receiver configured to receive a packet including a header and a payload, the header including a header error check (HEC) computed based on the header;

an error detect circuit configured to calculate an error indicator based on the received header;

an error correction circuit configured to modify the header based on an error correction table when the calculated error indicator corresponds to a value in the error correction table, the error correction circuit being configured to modify the header only in the synchronous communication mode; and

a payload processing circuit configured to forward the received payload when the calculated error indicator indicates an error free header and/or when the error correction circuit modifies the header and to detect a received packet error when the calculated error indicator indicates an error in the header and the calculated error indicator does not correspond to a value in the error correction table in the synchronous communication mode and to detect a received packet error in the asynchronous communication mode when the calculated error indicator indicates an error in the header.

16. The device of Claim 15 wherein the error indicator comprises a remainder value.

17. The device of Claim 15 wherein the header includes n data bits and wherein the error correction table comprises an n-entry table, each of the entries corresponding to an error in an associated one of the data bits.

18. The device of Claim 17 wherein the ad hoc network comprises a Bluetooth compliant network and wherein the payload processing circuit is further configured to discard the received payload if a received packet error is detected.

19. The device of Claim 15 wherein the payload processing circuit is further configured to discard the received payload if a received packet error is

detected and wherein the header further includes a destination device address and wherein the error correction circuit is further configured to determine a destination device address based on the modified header and wherein the payload processing circuit is further configured to forward the received payload when the determined destination device address corresponds to an expected destination device address and to detect a received packet error and discard the received payload when the determined destination device address does not correspond to the expected destination device address.

20. The device of Claim 15 further comprising:

means for negotiating a synchronous connection-oriented (SCO) link to establish the synchronous communication mode;

means for associating a frame time with the SCO link; and

means for characterizing a packet received at about the frame time as a synchronous communication mode received packet; and

wherein the error correction circuit is configured to modify the header only for synchronous communication mode received packets.

21. The device of Claim 20 wherein the header further includes a destination device address, the device further comprising:

means for characterizing packets not received at about the frame time as asynchronous communication mode received packets; and

wherein the payload processing circuit is configured to forward the received payload for asynchronous communication mode received packets having a destination device address corresponding to an expected destination device address and discard the received payload for asynchronous communication mode received packets having a destination device address not corresponding to the expected destination device address.

22. The device of Claim 21 wherein the payload processing circuit is configured, for synchronous mode received packets, to forward the received payload when the determined destination device address corresponds to the expected destination device address and to detect a received packet error and discard the

received payload when the determined destination device address does not correspond to the expected destination device address.

23. The device of Claim 22 further comprising:

means for estimating a bit error rate for the SCO link; and

wherein the error correction circuit is configured to disable modifying the header when the estimated bit error rate fails to satisfy an error correction criterion.

24. The device of Claim 15 wherein the device comprises a mobile terminal.

25. A device for error control in an ad hoc network, comprising:

means for receiving a packet including a header and a payload, the header including a header error check (HEC) computed based on the header;

means for calculating an error indicator based on the received header;

means for forwarding the received payload if the calculated error indicator indicates an error free header;

means for modifying the header based on an error correction table when the calculated error indicator corresponds to a value in the error correction table and forwarding the received payload; and

means for detecting a received packet error when the calculated error indicator indicates an error in the header and the calculated error indicator does not correspond to a value in the error correction table.